Appendix 1: Network Rail consultation comments

With reference to the protection of the railway, Network Rail has no objection in principle to the proposal, but below are requirements which MUST be met as the proposal includes works within 10m of the railway boundary and an interface with the railway boundary - therefore undertaking the works with the agreement and supervision of Network Rail is required. This is to ensure that the works on site, and as a permanent arrangement, do not impact upon the safe operation and integrity of the existing operational railway and for the avoidance of doubt of both the council and the developer who may not be aware of the potential for outside party proposals to impact upon the railway

Please forward the attached documents, forms and asset protection contact details to the applicant for actioning. An interface with Network Rail is REQUIRED for this proposal.

Network Rail recognises that conditions are imposed for a planning purpose and that they are fairly and reasonably related to the development and not be manifestly unreasonable. We believe that the comments included in this email are indeed fair and reasonable and relate to

Network Rail's need to ameliorate the impacts that might otherwise flow from the development.

Measurements to railway tracks and railway boundary

When designing proposals, the developer and council are advised, that any measurements must be taken from the operational railway / Network Rail boundary and not from the railway tracks themselves. From the existing railway tracks to the Network Rail boundary, the land will include critical infrastructure (e.g. cables, signals, overhead lines, communication equipment etc) and boundary treatments (including support zones, vegetation) which might be adversely impacted by outside party proposals unless the necessary asset protection measures are undertaken. No proposal should increase Network Rail's liability. To ensure the safe operation and integrity of the railway, Network Rail issues advice on planning applications and requests conditions to protect the railway and its boundary.

Obligations

Properties adjoining or in the vicinity of the railway are frequently the subject of obligations, rights, exceptions and reservations for the benefit of Network Rail's land and railway. The applicant must review the title to their property to see whether any such obligations etc exist and ensure that there is no non-compliance or breaches of them or any interference with or obstruction of Network Rail's rights and reservations. If the proposed development would not comply with or would breach any of the terms of the conveyance, the developer must revise his proposals.

RAMS

The developer is to submit directly to Network Rail asset protection, a Risk Assessment and Method Statement (RAMS) for all works to be undertaken within 10m of the operational railway under Construction (Design and Management) Regulations, and this is in addition to any planning consent. Network Rail would need to be re-assured the works on site follow safe

methods of working and have also taken into consideration any potential impact on Network Rail land and the existing operational railway infrastructure. Builder to ensure that no dust or debris is allowed to contaminate Network Rail land as the outside party would be liable for any clean-up costs. Review and agreement of the RAMS will be undertaken between Network Rail and the applicant/developer.

Network Rail would request that a condition is included in the planning consent as follows:

"A method statement and risk assessment must be submitted to the council and Network Rail for review and agreement prior to works commencing on site."

REASON: To ensure that the construction and subsequent maintenance of the proposal can be carried out without adversely affecting the safety, operational needs or integrity of the railway.

Fencing

Network Rail.

The applicant will provide at their own expense (if not already in place):
$\hfill \Delta$ suitable trespass proof steel palisade fence of a minimum height of 1.8m adjacent to the boundary with the railway/railway land.
$\hfill \Box$ The fence must be wholly constructed and maintained within the applicant's land ownership footprint.
$\ \square$ All foundations must be wholly constructed and maintained within the applicant's land ownership footprint without over-sailing or encroaching onto Network Rail's boundary.
$\hfill \Box$ The fence is REQUIRED be set back at least 1m from the railway boundary to ensure that Network Rail can maintain and renew its boundary treatments.
$\hfill\Box$ Existing Network Rail fencing, and boundary treatments, must not be damaged or removed in any way.
$\hfill \square$ Network Rail will not allow any maintenance works for proposal fencing or proposal boundary treatments to take place on its land.
$\ \square$ Proposal fencing must not be placed on the boundary with the railway.
□ Any fencing over 1.8m in height will require agreement from Network Rail with details of foundations and wind loading calculations submitted for review.

New residents of the development (particularly minors) may not be aware of the risks posed by accessing the railway. It would not be reasonable to require Network Rail to fund boundary works, fencing and boundary enhancements necessitated by outside party development adjacent to the railway. A condition to be included in the planning consent as follows:

☐ The fence should be maintained by the developer and that no responsibility is passed to

"Prior to occupation of the site the developer is to provide a suitable trespass proof fence adjacent to the boundary with the railway; the fencing details to be submitted to the council and Network Rail for agreement."

Reason: To protect the adjacent railway from unauthorised access

Encroachment

completion of works on site, does not affect the safety, operation or integrity of the operational railway, Network Rail land and its infrastructure or undermine or damage or adversely affect any railway land and structures.
☐ There must be no physical encroachment of the proposal onto Network Rail land, no oversailing into Network Rail air-space and no encroachment of foundations onto Network Rail land or under the Network Rail boundary.
□ All buildings and structures on site including all foundations / fencing foundations must be constructed wholly within the applicant's land ownership footprint.
□ Buildings and structures must not over-sail Network Rail air-space.
□ Any future maintenance must be conducted solely within the applicant's land ownership.
□ Rainwater goods must not discharge towards or over the railway boundary
□ Should the applicant require access to Network Rail land to facilitate their proposal they would need to approach the Network Rail Asset Protection Team at least 20 weeks before any works are due to commence on site. The applicant would be liable for all costs incurred in facilitating the proposal and an asset protection agreement may be necessary to undertake works. Network Rail reserves the right to refuse any works by an outside party that may adversely impact its land and infrastructure.
□ Any unauthorised access to Network Rail air-space or land will be deemed an act of trespass
Lighting
To ensure the ongoing safety of the operational railway the applicant's lighting design must
demonstrate no overspill of light onto Network Rail land.
<u>Scaffolding</u>
Scaffolding which is to be constructed within 10 metres of the Network Rail / railway boundary must be erected in such a manner that at no time will any poles over-sail the railway and protective netting around such scaffolding must be installed. The applicant / applicant's contractor must consider if they can undertake the works and associated scaffolding / access for working at height within the footprint of their land ownership boundary. The applicant is reminded that when pole(s) are erected for construction or maintenance works, they must have a minimum 3m failsafe zone between the maximum height of the pole(s) and the railway boundary.
This is to ensure that the safety of the railway is preserved, and that scaffolding does not:
□ Fall into the path of on-coming trains
□ Fall onto and damage critical and safety related lineside equipment and infrastructure
□ Fall onto overhead lines bringing them down, resulting in serious safety issues (this is

applicable if the proposal is above the railway and where the line is electrified). Network Rail

would request a condition is applied as follows within the planning consent:

"Details of scaffolding works within 10m of the railway boundary, to be submitted to the council and Network Rail for agreement."

Reason - In the interests of protecting the railway and its boundary from over-sailing scaffolding.

Vibro-Impact Machinery

If vibro-compaction machinery / piling machinery or piling and ground treatment works are to be undertaken as part of the development, details of the use of such machinery and a method statement must be submitted to the Network Rail for agreement.

□ All works shall only be carried out in accordance with the method statement and the works will be reviewed by Network Rail. The Network Rail Asset Protection Engineer will need to review such works in order to determine the type of soil (e.g. sand, rock) that the works are being carried out upon and also to determine the level of vibration that will occur as a result of the piling.

☐ The impact upon the railway is dependent upon the distance from the railway boundary of the piling equipment, the type of soil the development is being constructed upon and the level of vibration. Each proposal is therefore different and thence the need for Network Rail to review the piling details / method statement.

Maximum allowable levels of vibration - CFA piling is preferred as this tends to give rise to less vibration. Excessive vibration caused by piling can damage railway structures and cause movement to the railway track as a result of the consolidation of track ballast. The developer must demonstrate that the vibration does not exceed a peak particle velocity of 5mm/s at any structure or with respect to the rail track.

If vibro-impact equipment is to be used we would request a condition is added to the planning consent as follows:

"Prior to any vibro-impact works on site, a risk assessment and method statement shall be submitted to the LPA and Network Rail."

Reason – to prevent any piling works and vibration from de-stabilising or impacting the railway.

Access to Railway

All roads, paths or ways providing access to any part of the railway undertaker's land both temporary and permanent, must remain open and unblocked (24/7, 365 – around the clock) both during construction works and as a permanent arrangement.

	ne	pro	posa	al ı	must	not	encr	oach	onto	any	Netwo	ork	Rail	acce	SS	road,	paths	or	ways	of
acce	SS	to	any	pa	art of	Ne	twork	Rail	land.	This	also	inc	lude	s em	erg	ency	vehic	es	ability	to
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□ The applicant is	reminded tha	t each Net	work Rail	has a	specific	right of	way and	as such
any developer is re	equested to c	ontact the	Network I	Rail Pr	roperty S	Services	Team to	discuss
the impact of the p	roposal upon	our access	S.					

Demolition

The demolition works on site must be carried out so that they do not endanger the safe operation of the railway, or the stability of the adjoining Network Rail structures and land. The demolition of the existing building(s), due to its close proximity to the Network Rail boundary, must be carried out in accordance with an agreed method statement. Review of the method statement will be undertaken by the Network Rail Asset Protection Engineer before the development and any demolition works on site can commence. Network Rail would like to add that the applicant is strongly recommended to employ companies to demolish buildings / structures belonging to the National Federation of Demolition Contractors. This will ensure that all demolition works are carried out to professional standards and the company itself will also include liability insurance as part of its service.

Condition:

"No demolition works shall be undertaken until a demolition methodology statement (including mitigation measures) has been submitted to the LPA and issued to Network Rail. The demolition methodology statement strategy shall be implemented in full throughout the demolition period."

Reason - To safeguard the railway and its boundary from demolition machinery and dust and debris

Drainage proposals and Network Rail land

The NPPF states:

"178. Planning policies and decisions should ensure that:

a) A site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability."

And

"163. When determining planning applications, local planning authorities should ensure flood risk is not increased elsewhere."

In order to comply with the NPPF, the applicant must ensure that the proposal drainage does not increase Network Rail's liability, or cause flooding pollution or soil slippage, vegetation or boundary issues on railway land. Therefore, the proposed drainage on site will include the following:

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$\hfill \Box$ All surface waters and foul waters must drain away from the direction of the railway boundary.
$\ \square$ Soakaways for the proposal must be placed at least 30m from the railway boundary.
$\hfill \Box$ Any drainage proposals for less than 30m from the railway boundary must ensure that surface and foul waters are carried from site in closed sealed pipe systems.
$\hfill \square$ Suitable drainage or other works must be provided and maintained by the developer to prevent surface water flows or run-off onto Network Rail's land and infrastructure.
□ Proper provision must be made to accept and continue drainage discharging from Network Rail's property.

□ Drainage works must not impact upon culverts, including culverts/brooks etc that drain under the railway. The applicant will not be permitted to direct surface or foul waters into culverts which run under the railway – any discharge of surface water under the railway via a culvert will require review and agreement from Network Rail who reserve the right to refuse use of any culverts.
☐ The developer must ensure that there is no surface or sub-surface flow of water towards the operational railway.
□ Rainwater goods must not discharge in the direction of the railway or onto or over the railway boundary.
□ Consideration of the impacts upon railway drainage of Astro-Turf/plastic lawn replacements, both during construction and any future inclusion of said Astro-turf by residents going forward.

NB: Soakaways can materially affect the strength of soil leading to stability issues. A large mass of water wetting the environment can soften the ground, and a build-up of water can lead to issues with the stability of Network Rail retaining walls/structures and the railway boundary. Network Rail does not accept the installation of soakaways behind any retaining structures as this significantly increases the risk of failure and subsequent risk to the travelling public.

If the developer and the council insists upon a sustainable drainage and flooding system then the issue and responsibility of flooding, water saturation and stability issues should not be passed onto Network Rail. We recognise that councils are looking to proposals that are sustainable, however, we would remind the council that flooding, drainage, surface and foul water management risk as well as stability issues should not be passed 'elsewhere', i.e. on to Network Rail land.

The drainage proposals are to be agreed with Network Rail and surface water drainage on the site should be removed by a closed sealed pipe system.

The HSE identifies railways as a Major Hazard Industry. An earthwork failure within a highhazard area has the potential to result in a catastrophic accident with multiple fatalities or long-lasting environmental issues. It should be noted that where the actions of an adjacent landowner have caused a landslip on the railway the loss adjusters are likely to advise recovery of Network Rail costs from the 3rd party, which would include costs of remediation and recovery of costs to train operators. Many railway earthworks were constructed in the Victorian period and are susceptible to failure by water saturation. Water saturation leads to an increase in pore water pressure within the earthwork material. Please also note that railways, and former railway land adjacent to it, is considered as contaminated land due to historic use of railways, which can affect the suitability of infiltration drainage.

Network Rail would request that a condition is included in the planning consent as follows:

Condition:

"Prior to the commencement of the development details of the disposal of both surface water and foul water drainage directed away from the railway shall be submitted to the Local Planning Authority and Network Rail."

Reason: To protect the adjacent railway from the risk of flooding, soil slippage and pollution.

The Council must ensure that suitable arrangements are in place for the maintenance and renewal of all new/amended drainage for the life time of the development, to mitigate risk of flooding to any adjoining land.

Excavation and Earthworks and Network Rail land:

The NPPF states:

"178. Planning policies and decisions should ensure that:

a) A site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability."

In order to comply with the NPPF, the applicant will agree all excavation and earthworks within 10m of the railway boundary with Network Rail. Network Rail will need to review and agree the works to determine if they impact upon the support zone of our land and infrastructure as well as determining relative levels in relation to the railway. Network Rail would need to agree the following:

□ Alterations to ground levels
☐ De-watering works
□ Ground stabilisation works
□ Works to retaining walls
□ Construction and temporary works
□ Maintenance of retaining walls
☐ Ground investigation works must not be undertaken unless agreed with Network Rail.
□ Confirmation of retaining wall works (either Network Rail and/or the applicant).
☐ Alterations in loading within 15m of the railway boundary must be agreed with Network Rail.
☐ For works next to a cutting or at the toe of an embankment the developer / applicant would be required to undertake a slope stability review.

Network Rail would need to review and agree the methods of construction works on site to ensure that there is no impact upon critical railway infrastructure. No excavation works are to commence without agreement from Network Rail. The council are advised that the impact of outside party excavation and earthworks can be different depending on the geography and soil in the area. The council and developer are also advised that support zones for railway infrastructure may extend beyond the railway boundary and into the proposal area. Therefore, consultation with Network Rail is requested. Any right of support must be maintained by the developer.

Network Rail requests a condition is included in the planning consent as follows:

Condition:

"Prior to the commencement of the development full details of ground levels, earthworks and excavations to be carried out near to the railway boundary shall be submitted to the Local Planning Authority and Network Rail."

Reason: To protect the adjacent railway and its boundary.

Boundary treatments

Any structures on the applicant's land which runs seamlessly into a section of Network Rail infrastructure will require Network Rail agreement/comments and interface/supervision to ensure that there is no impact to or increase in risk to Network Rail assets.

3m Gap

Network Rail REQUIRES that the developer includes a minimum 3 metres gap between the buildings and structures on site and the railway boundary. Less than 3m from the railway boundary to the edge of structures could result in construction and future maintenance works being undertaken on Network Rail land, and close to the railway boundary potentially impacting support zones or lineside cabling. All the works undertaken to facilitate the design and layout of the proposal should be undertaken wholly within the applicant's land ownership footprint including all foundation works. Network Rail requires a minimum 3m easement between structures on site and the railway boundary to ensure that we can maintain and renew our boundary treatments. No part of the structure should over-sail the railway boundary or discharge rainwater goods onto or toward the railway boundary.

Noise

The council and the developer (along with their chosen acoustic contractor) are recommended to engage in discussions to determine the most appropriate measures to mitigate noise and vibration from the existing operational railway to ensure that there will be no future issues for residents once they take up occupation of the dwellings.

The NPPF states, "182. Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use), in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed."

Network Rail is aware that residents of developments adjacent to or in close proximity to, or near to the existing operational railway have in the past discovered issues upon occupation of dwellings with noise and vibration. It is therefore a matter for the developer and the council via mitigation measures and conditions to ensure that any existing noise and vibration, and the potential for any future noise and vibration are mitigated appropriately prior to construction.

To note are:

□ The current level of railway usage may be subject to change at any time without prior notification including increased frequency of trains, night-time train running, heavy freight trains, trains run at weekends /bank holidays.
Maintenance works to trains could be undertaken at night and may mean leaving the
trains' motors running which can lead to increased levels of noise and vibration.
$\hfill \square$ Network Rail carry out works at night on the operational railway when normal rail traffic is suspended and these works can be noisy and cause vibration.
□ Network Rail may need to conduct emergency works on the existing operational railway line which may not be notified to residents in advance due to their safety critical nature and may occur at any time of the day or night, during bank holidays and at weekends.

□ Works to the existing operational railway may include the presence of plant and machinery as well as vehicles and personnel for works.
□ The proposal should not prevent Network Rail from its statutory undertaking. Network Rail is a track authority. It may authorise the use of the track by train operating companies or independent railway operators and may be compelled to give such authorisation. Its ability to respond to any enquiries regarding intended future use is therefore limited.
☐ The scope and duration of any Noise and Vibration Assessments may only reflect the levels of railway usage at the time of the survey.
□ Any assessments required as part of CDM (Construction Design Management) or local planning authority planning applications validations process are between the developer and their appointed contractor.
□ Network Rail cannot advise third parties on specific noise and vibration mitigation measures. Such measures will need to be agreed between the developer, their approved acoustic contractor and the local planning authority.
□ Design and layout of proposals should take into consideration and mitigate against existing usage of the operational railway and any future increase in usage of the said existing operational railway.
□ Noise and Vibration Assessments should take into account any railway depots, freight depots, light maintenance depots in the area. If a Noise and Vibration Assessment does not take into account any depots in the area then the applicant will be requested to reconsider the findings of the report.
Railway land which is owned by Network Rail but which may be deemed to be 'disused' or 'mothballed', may be brought back into use. Any proposals for residential development should include mitigation measures agreed between the developer, their acoustic contractor and the LPA to mitigate against future impacts of noise and vibration, based on the premise that the railway line may be brought back into use.
□ Works may be carried out to electrify railway lines and this could create noise and vibration for the time works are in progress. Electrification works can also result in loss of lineside vegetation to facilitate the erection of stanchions and equipment.

Trees

Proposals for the site should take into account the recommendations of, 'BS 5837:2012 Trees in Relation to Design, Demolition and Construction', which needs to be applied to prevent long term damage to the health of trees on Network Rail land so that they do not become a risk to members of the public in the future.

No trees shall be planted next to the boundary with the railway land and the operational railway, except for evergreen shrubs which shall be planted a minimum distance from the Network Rail boundary that is equal to their expected mature growth height. The vegetation planting must be in line with the attached matrix which has been agreed with the Tree Council. This is to prevent long term issues with leaf fall impacting the operational railway.

Parking / Hard Standing Area

As the proposal calls for the following adjacent to the boundary with the operational railway, running parallel to the operational railway or where the existing operational railway is below the height of the proposal site:

□ hard standing areas
□ turning circles
$\hfill \square$ roads, public highways to facilitate access and egress from developments
Network Rail requests the installation of suitable high kerbs or crash barriers (e.g. Armco Safety Barriers).

This is to prevent vehicle incursion from the proposal area impacting upon the safe operation of the railway.

Network Rail requests that a condition is included within the planning consent as follows:

"Details of appropriate vehicle safety protection measures along the boundary with the railway shall be submitted to the Local Planning Authority (in consultation with Network Rail."

Reason: to prevent the design and layout of the road and parking spaces from impacting the adjacent operational railway with accidental vehicle incursion BAPA (Basic Asset Protection Agreement)

As the proposal includes works which could impact the existing operational railway and in order to facilitate the above, a BAPA (Basic Asset Protection Agreement) will need to be agreed between the developer and Network Rail. The developer will be liable for all costs incurred by Network Rail in facilitating this proposal, including any railway site safety costs, possession costs, asset protection costs / presence, site visits, review and agreement of proposal documents and any buried services searches. The BAPA will be in addition to any planning consent.

All new enquiries will need to be submitted via the Asset Protection and Optimisation -

Customer Portal

Link to ASPRO ACE Portal ASPRO Network Rail Implementation (oraclecloud.com). From there, the client can create an account and submit their enquiry. Enquiry will then be assigned to one of the Asset Protection team to progress. The assigned team member will then be in a position to review and comment on any submissions from the outside party.

No works are to commence until agreed with Network Rail. Early engagement with Network Rail is strongly recommended.

Should the above proposal be approved by the council and should there be conditions, where the proposal interfaces with the railway (as outlined in this response) the outside party is advised that a BAPA (Basic Asset Protection Agreement) must be in place, in order for Network Rail to review and agree the documentation and works outlined in conditions (and those areas covered by the discharge of conditions).

The applicant is advised that before the proposal progresses (should it be approved) they will be required to submit the development form to Network Rail's Asset Protection team and agree the BAPA before any works commence on site.

Network Rail is a Government funded Organisation and we are expected to recover our involvement costs from this type of interface, to proceed in more detail with discussions a signed Basic Asset Protection Agreement (BAPA) would be required to be in place.

Permanent impacts of development are usually material considerations (such as the position of permanent structures, or drainage design etc) and where these are likely to occur, requests for planning conditions or scheme amendments are requested to protect the existing railway infrastructure from the impacts of the works on site and as a permanent arrangement.

Controls on the temporary impact of construction to outside party land should also be picked up via building control, or in some cases a party wall surveyor.

For further information on interfacing with Network Rail please see Working by the railway - Network Rail